

REMARKS

In the Office Action of February 27, 2006, a restriction requirement was imposed dividing the claims into three different groups. Specifically, the Office Action imposed a restriction requirement between the claims of Group I (Claims 1-17) drawn to a method of treating a surface of a substrate, Group II (Claims 18-26) drawn to an inorganic oxide substrate, and Group III (Claims 27-33) also drawn to a method of treating a surface of a substrate. Applicant respectfully traverses the restriction requirement with respect to Groups I and III.

According to MPEP § 803, two criteria must be met for a restriction requirement to be proper. First, the inventions must be independent or distinct as claimed. Second, a serious burden must be imposed on the Examiner. As stated in MPEP § 803, “if the search and examination of an entire application can be made without serious burden, the Examiner must examine it on the merits, even though it includes claims to independent or distinct inventions.” Applicant respectfully submits that the close relationship between the subject matter of the claims in Groups I and III, at least, would allow all of the claims in those groups to be examined together without imposing any significant additional burden for either search or examination.

In the present case, the method claims of Group I and III are so closely related that the two sets of claims should not require separate fields of search. The extremely close relationship between the method claims is illustrated by the fact that certain steps recited in independent method claim 1 are also recited in independent method claim 27 and that other steps in the methods are correspondingly similar.

Both claim 1 and 27 are directed to methods of treating substrate surfaces. The two steps of claim 1 include forming hydroxyl groups on the substrate surface by exposing the surface to a plasma (step (a)) and reacting the surface hydroxyl groups with epoxy-functional molecules *in situ* in the absence of plasma to provide surface-bound spacer chains (step (b)). Similarly, claim 27 also recites forming hydroxyl groups on the substrate surface using a plasma (steps (a) and (b)) and reacting the surface hydroxyl groups with epoxy-functional molecules *in situ* in the absence of plasma to provide surface-bound spacer chains (step (c)). Notably, step (b) of claim 1 is identical to step (c) of claim 27 and thus any search directed to these steps will uncover prior art pertinent to both methods. Furthermore, the formation of surface-bound hydroxyl groups

using a plasma is a necessary structural element of both claim 1 and claim 27. Rather than presenting a completely "different mode of operation," steps (a) and (b) of claim 27 merely specify a way of forming these surface-bound hydroxyl groups. In claim 1, hydroxyl groups are formed directly by exposing the surface to a plasma while in claim 27, hydroxyl groups are formed indirectly by first implanting silicon-chlorine functionalities into the surface by exposing the surface to a plasma and then exposing the silicon-chlorine functionalities to a second gas.

Ultimately, because both methods involve the core elements of using a plasma to generate surface-bound hydroxyl groups and further reacting the hydroxyl groups with epoxy-functional molecules to provide surface-bound spacer chains, searches directed to these elements are expected to uncover prior art relevant to both methods. Moreover, due to the similarities between the method claims it is likely that the features that distinguish the method of claim 1 from the pertinent prior art references will be the same features that distinguish the method of claim 27 from those references. For these reasons, the search and examination of both sets of claims can be conducted without serious burden to the Examiner and Applicants respectfully request that the restriction requirement between Groups I and III be withdrawn.

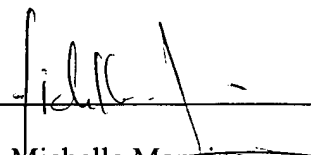
CONCLUSION

For the foregoing reasons, it is respectfully submitted that the claims of Groups I and III may be examined together without placing a serious burden on the Examiner, and that appropriate reasons for insisting upon restriction of the claims have not been properly established. Thus, it is respectfully requested that the restriction requirement between the inventions of Groups I and III be withdrawn and that pending claims 1-17 and 27-33 be examined together.

Respectfully submitted,

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